



SEQUENCE LISTING

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LUKACS, CHRISTINE MARIA

<120> CRYSTALS OF GLUCOKINASE AND METHODS OF GROWING THEM

<130> 20892 US2

<140> 10/816,708

<141> 2004-04-02

<150> 10/318,308

<151> 2002-12-12

<150> 60/341,988

<151> 2001-12-19

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<170> PatentIn Ver. 3.3

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<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic
polypeptide

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Tyr Glu Arg Asp Glu Gly Asp Lys Trp Arg Asn Lys Lys Phe Glu Leu
35 40 45

Gly Leu Glu Phe Pro Asn Leu Pro Tyr Tyr Ile Asp Gly Asp Val Lys
50 55 60

Leu Thr Gln Ser Met Ala Ile Ile Arg Tyr Ile Ala Asp Lys His Asn
65 70 75 80

Met Leu Gly Gly Cys Pro Lys Glu Arg Ala Glu Ile Ser Met Leu Glu
85 90 95

Gly Ala Val Leu Asp Ile Arg Tyr Gly Val Ser Arg Ile Ala Tyr Ser
100 105 110

Lys Asp Phe Glu Thr Leu Lys Val Asp Phe Leu Ser Lys Leu Pro Glu
115 120 125

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Gly	Asp	His	Val	Thr	His	Pro	Asp	Phe	Met	Leu	Tyr	Asp	Ala	Leu	Asp
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Val	Val	Leu	Tyr	Met	Asp	Pro	Met	Cys	Leu	Asp	Ala	Phe	Pro	Lys	Leu
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Val	Cys	Phe	Lys	Lys	Arg	Ile	Glu	Ala	Ile	Pro	Gln	Ile	Asp	Lys	Tyr
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Leu	Lys	Ser	Ser	Lys	Tyr	Ile	Ala	Trp	Pro	Leu	Gln	Gly	Trp	Gln	Ala
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Ser	Gln	Val	Glu	Gln	Ile	Leu	Ala	Glu	Phe	Gln	Leu	Gln	Glu	Glu	Asp
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Leu	Lys	Lys	Val	Met	Arg	Arg	Met	Gln	Lys	Glu	Met	Asp	Arg	Gly	Leu
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Arg	Leu	Glu	Thr	His	Glu	Glu	Ala	Ser	Val	Lys	Met	Leu	Pro	Thr	Tyr
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Val	Arg	Ser	Thr	Pro	Glu	Gly	Ser	Glu	Val	Gly	Asp	Phe	Leu	Ser	Leu
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Asp	Leu	Gly	Gly	Thr	Asn	Phe	Arg	Val	Met	Leu	Val	Lys	Val	Gly	Glu
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Gly	Glu	Glu	Gly	Gln	Trp	Ser	Val	Lys	Thr	Lys	His	Gln	Met	Tyr	Ser
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Lys	Lys	Leu	Pro	Leu	Gly	Phe	Thr	Phe	Ser	Phe	Pro	Val	Arg	His	Glu
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Asp	Ile	Asp	Lys	Gly	Ile	Leu	Leu	Asn	Trp	Thr	Lys	Gly	Phe	Lys	Ala
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Ser	Gly	Ala	Glu	Gly	Asn	Asn	Val	Val	Gly	Leu	Leu	Arg	Asp	Ala	Ile
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Lys	Arg	Arg	Gly	Asp	Phe	Glu	Met	Asp	Val	Val	Ala	Met	Val	Asn	Asp
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Thr Val Ala Thr Met Ile Ser Cys Tyr Tyr Glu Asp His Gln Cys Glu
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 Val Gly Met Ile Val Gly Thr Gly Cys Asn Ala Cys Tyr Met Glu Glu
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 Met Gln Asn Val Glu Leu Val Glu Gly Asp Glu Gly Arg Met Cys Val
 465 470 475 480
 Asn Thr Glu Trp Gly Ala Phe Gly Asp Ser Gly Glu Leu Asp Glu Phe
 485 490 495
 Leu Leu Glu Tyr Asp Arg Leu Val Asp Glu Ser Ser Ala Asn Pro Gly
 500 505 510
 Gln Gln Leu Tyr Glu Lys Leu Ile Gly Gly Lys Tyr Met Gly Glu Leu
 515 520 525
 Val Arg Leu Val Leu Leu Arg Leu Val Asp Glu Asn Leu Leu Phe His
 530 535 540
 Gly Glu Ala Ser Glu Gln Leu Arg Thr Arg Gly Ala Phe Glu Thr Arg
 545 550 555 560
 Phe Val Ser Gln Val Glu Ser Asp Thr Gly Asp Arg Lys Gln Ile Tyr
 565 570 575
 Asn Ile Leu Ser Thr Leu Gly Leu Arg Pro Ser Thr Thr Asp Cys Asp
 580 585 590
 Ile Val Arg Arg Ala Cys Glu Ser Val Ser Thr Arg Ala Ala His Met
 595 600 605
 Cys Ser Ala Gly Leu Ala Gly Val Ile Asn Arg Met Arg Glu Ser Arg
 610 615 620
 Ser Glu Asp Val Met Arg Ile Thr Val Gly Val Asp Gly Ser Val Tyr
 625 630 635 640
 Lys Leu His Pro Ser Phe Lys Glu Arg Phe His Ala Ser Val Arg Arg
 645 650 655
 Leu Thr Pro Ser Cys Glu Ile Thr Phe Ile Glu Ser Glu Glu Gly Ser
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 20 25 30
 Arg Leu Glu Thr His Glu Glu Ala Ser Val Lys Xaa Leu Pro Thr Tyr
 35 40 45
 Val Arg Ser Thr Pro Glu Gly Ser Glu Val Gly Asp Phe Leu Ser Leu
 50 55 60
 Asp Leu Gly Gly Thr Asn Phe Arg Val Xaa Leu Val Lys Val Gly Glu
 65 70 75 80
 Gly Glu Glu Gly Gln Trp Ser Val Lys Thr Lys His Gln Thr Tyr Ser
 85 90 95
 Ala Pro Glu Asp Ala Xaa Thr Gly Thr Ala Glu Met Leu Phe Ala Ala
 100 105 110

Ile	Ser	Glu	Cys	Ile	Ser	Asp	Phe	Leu	Asp	Lys	His	Gln	Xaa	Lys	His		
		115					120					125					
Lys	Lys	Leu	Pro	Leu	Gly	Phe	Thr	Phe	Ser	Phe	Pro	Val	Ala	His	Ala		
		130				135					140						
Asp	Ile	Asp	Ala	Gly	Ile	Leu	Leu	Asn	Trp	Thr	Lys	Gly	Phe	Lys	Ala		
		145			150					155					160		
Ser	Gly	Ala	Glu	Gly	Asn	Asn	Val	Val	Gly	Leu	Leu	Arg	Asp	Ala	Ile		
				165					170					175			
Lys	Arg	Arg	Gly	Asp	Phe	Glu	Xaa	Asp	Val	Val	Ala	Xaa	Val	Asn	Asp		
			180					185					190				
Thr	Val	Ala	Thr	Xaa	Ile	Ser	Cys	Tyr	Tyr	Glu	Asp	His	Gln	Cys	Glu		
		195					200					205					
Val	Gly	Xaa	Ile	Val	Gly	Thr	Gly	Cys	Asn	Ala	Cys	Tyr	Xaa	Glu	Glu		
		210				215					220						
Xaa	Gln	Asn	Val	Glu	Leu	Val	Glu	Gly	Asp	Glu	Gly	Arg	Xaa	Cys	Val		
		225			230				235						240		
Asn	Thr	Glu	Trp	Gly	Ala	Phe	Gly	Asp	Ser	Gly	Glu	Leu	Asp	Glu	Phe		
				245				250						255			
Leu	Leu	Glu	Tyr	Asp	Arg	Leu	Val	Asp	Glu	Ser	Ser	Ala	Asn	Pro	Gly		
			260					265					270				
Gln	Gln	Leu	Tyr	Glu	Lys	Leu	Ile	Gly	Gly	Lys	Tyr	Xaa	Gly	Glu	Leu		
		275					280					285					
Val	Arg	Leu	Val	Leu	Leu	Arg	Leu	Val	Asp	Glu	Asn	Leu	Leu	Phe	His		
		290				295					300						
Gly	Glu	Ala	Ser	Glu	Gln	Leu	Arg	Thr	Arg	Gly	Ala	Phe	Glu	Thr	Arg		
		305			310					315					320		
Phe	Val	Ser	Gln	Val	Glu	Ser	Asp	Thr	Gly	Asp	Arg	Lys	Gln	Ile	Tyr		
				325					330					335			
Asn	Ile	Leu	Ser	Thr	Leu	Gly	Leu	Arg	Pro	Ser	Thr	Thr	Asp	Cys	Asp		
			340					345					350				
Ile	Val	Arg	Arg	Ala	Cys	Glu	Ser	Val	Ser	Thr	Arg	Ala	Ala	His	Xaa		
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Cys	Ser	Ala	Gly	Leu	Ala	Gly	Val	Ile	Asn	Arg	Xaa	Arg	Glu	Ser	Arg		
		370				375					380						
Ser	Glu	Asp	Val	Xaa	Arg	Ile	Thr	Val	Gly	Val	Asp	Gly	Ser	Val	Tyr		
		385			390				395					400			
Lys	Leu	His	Pro	Ser	Phe	Lys	Glu	Arg	Phe	His	Ala	Ser	Val	Arg	Arg		
				405					410					415			

Leu Thr Pro Ser Cys Glu Ile Thr Phe Ile Glu Ser Glu Glu Gly Ser
420 425 430

Gly Arg Gly Ala Ala Leu Val Ser Ala Val Ala Cys
435 440